

# Yuma County Report for the 2005 Youth Risk Behavior Survey

by

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**Executive Summary ..... i**

**Introduction.....1**

**Methodology .....2**

**Section 1: Tobacco Use .....3**

**Section 2: Healthy Eating and Physical Activity.....7**

**Section 3: Overweight and Weight Control.....15**

**Section 4: Asthma .....21**

**Section 5: Diabetes .....25**

**Limitations.....27**

**Appendix A: The 2005 Arizona Youth Risk Behavior Survey Questionnaire**

**Appendix B: The 2005 Arizona Youth Risk Behavior Survey Highlights — Yuma**

**Appendix C: The 2005 Arizona Youth Risk Behavior Survey Highlights — Arizona**

The Youth Risk Behavior Survey (YRBS) was designed to provide the estimates to measure risk behaviors and self-reported health status among students. The 2005 YRBS was conducted among high school students in Yuma County. It helps shed the light for setting the priority to reduce risk behaviors and promote health among high school students in the community.

This report provides the estimates of the prevalence of risk behaviors and health status among Yuma high school students. It uses 2005 YRBS data to examine whether there were differences in risk behaviors and health status among high school students in Arizona and Yuma. It also presents those estimates by gender, age group, grade, and race/ethnicity and compares the difference across the groups for Yuma County.

### Key Findings

- **About 60 percent of Yuma high school students have tried smoking. One in seven Yuma high school students smoked before 13 years old and one in five smoked during the past month. Although more than half of high school student smokers tried to quit, the prevalence of tobacco use increased among older students.** The results suggest a continuing intervention need to target high school students in preventing them from smoking, particularly early initiation of tobacco use among adolescents. It is also essential to reduce students' access to tobacco products and reduce their exposure to environmental tobaccos smoke. Given evidence of students' intention to quit smoking yet increasing tobacco use among older students, it remains a clear need to help them win the battle through effective smoke cessation programs.
- **Among Yuma high school students, less than one fifth ate five or more servings of fruits and vegetables and one in three did not meet CDC recommendation of sufficient physical activity. Only 17.8 percent of Yuma high school students had three or more dairy products daily. More than one in five students ate baked food, drank regular soda, and had sugared beverages daily. In addition, about 10 percent of students ate fast food daily. However, only one in five students ate breakfast daily. More than 40 percent of Yuma high school students watched three or more hours of TV per day.** These findings reveal the unhealthy eating behaviors and sedentary life style among Yuma high school students. Efforts should be focused on preventing chronic diseases associated with diet, exercise and weight, strengthening the link between nutrition and physical activity in health promotion, improving health education and accessibility of healthy foods in a variety of settings. Integration of school program, family and community involvement is essential to promote healthy life style among students.
- **One third of Yuma high school students were overweight or at risk of becoming overweight. Two percent of high school students were informed by a doctor or nurse that they have diabetes. About half of students tried to lose weight through eating less or exercise. One third of students tried to vomit or took laxatives and some tried more than 24 hours of fasting or took diet pills to lose weight.** These findings emphasize the need to promote a healthy lifestyle to prevent obesity and its related chronic diseases among students. It is important to promote healthy weight among high school students through health education on self-assessment of healthy weight and healthy weight control behaviors.
- **The prevalence of lifetime asthma and current asthma were similar among Yuma high school students across different age groups. Older high school students were less likely to have had asthma episode or attack than the younger students.** This difference indicates the necessity of combining effective management of the disease with asthma prevention.

The Arizona Youth Risk Behavior Survey (YRBS) is one component of the Youth Risk Behavior Surveillance System (YRBSS) developed by the Centers for Disease Control and Prevention (CDC). The Youth Risk Behavior Surveillance System was designed to focus on behaviors among youth related to the leading causes of morbidity and mortality among youth and to assess how these risk behaviors change over time.

The 2005 Arizona Youth Risk Behavior Survey was conducted and over sampled in Steps communities including Yuma County, Cochise County, Santa Cruz County and the Tohono O’odham Nation. Students completed a self-administered, 99-item questionnaire. Survey procedures were designed to protect the privacy of students by allowing for anonymous and voluntary participation. Local parental permission procedures were followed before survey administration. The weighted demographic characteristics of the Yuma YRBS sample are as follows:

<b>Gender</b>	<b>Percent</b>	<b>Grade Level</b>	<b>Percent</b>	<b>Race/Ethnicity</b>	<b>Percent</b>
Females	49.3%	9th grade	31.5%	Non-Hispanic black	2.1%
Males	50.7%	10th grade	25.9%	Hispanic/Latino	78.8%
		11th grade	21.6%	Non-Hispanic white	14.5%
		12th grade	20.9%	All other races	3.1%
		Other	0.1%	Multiple races	1.5%

The results of survey questions and weighted percentages are included in Appendix B and C. The responses in the report represent all students in grades 9-12 surveyed unless otherwise specified. The report presents selected findings from the 2005 Arizona YRBS that measure health-risk behaviors and self-reported health status of five categories:

Section 1: Tobacco Use

Section 2: Healthy Eating and Physical Activity

Section 3: Weight

Section 4: Asthma

Section 5: Diabetes

The Youth Risk Behavior Surveillance System used independent two-stage cluster samples for the surveys to obtain countywide cross-sectional data representative of high school students in grades 9-12. The first stage sampling consisted of all public and charter schools at the high school level. Schools were selected with a probability proportional to school enrollment size. For the second sampling stage, classes of a required subject or a required school period were randomly selected. All students in the selected classes were eligible to participate in the survey. Students, parents, schools and school districts had the opportunity to decline participation. In Yuma County, 1,501 students in 9 public high schools completed the Youth Risk Behavior Survey during the spring of 2005. The school response rate was 90 percent, the student response rate was 86 percent, and the overall response rate was 77 percent.

All the statistical analyses were conducted using SAS 9.1. The PROC SURVEYMEANS procedure in SAS 9.1 was used to perform the analysis of the mean and 95% confidence intervals (CI) of the prevalence of health-risk behaviors and health status from YRBS. This procedure uses the method of Taylor series linearization for variance estimation and accounts for the complex sample design of YRBS.

The data presented in this report were weighted to take into account the probability of selection and to reflect the actual sex, grade, and racial/ethnic composition of high schools in Yuma County. The weighted results provide countywide estimates of all high school students (grades 9-12) and can be used to make important inferences concerning the priority health-risk behaviors of all regular public school students in grade 9 through 12.

To produce statistically representative estimates, the prevalence rates of a health-risk behavior or status for some subgroups are not presented due to the small number in that subgroup population. Estimates with relative standard errors of 30% or higher are considered unreliable and are not presented. Differences between percentages were evaluated using two-side t-test at the 0.05 level and assuming independence. Terms such as “greater than” and “less than” indicate a statistically significant difference. Terms such as “similar” and “no difference” indicate that the statistics being compared were not significantly different. A lack of commentary about any two estimates does not necessarily mean that a t-test was performed and the difference was found to be not statistically significant.

## Background

Tobacco use is the leading preventable cause of premature mortality in the United States with 18 percent of all deaths attributable to tobacco use. Cigarette smoking increases the risk of heart disease, chronic obstructive pulmonary disease, acute respiratory illness, stroke, and several kinds of cancer (lung, larynx, mouth, esophagus, pharynx, and bladder). Cigarette smoking also contributes to cancer of the pancreas, kidney, and cervix. Smoking during pregnancy causes spontaneous abortions, low birth weight, and sudden infant death syndrome. Studies also have found that secondhand smoke exposure causes heart disease among adults. Furthermore, tobacco use may increase the probability that an adolescent will use other drugs. Preventing tobacco use among youth has emerged as a major focus of tobacco control efforts.<sup>(1,2,3)</sup>

## Overview

Overall, about 60 percent of Yuma high school students had ever tried cigarette smoking. About one in seven (14.3%) students smoked before age 13 years. Approximately half (51.0%) of Yuma high school student smokers tried to quit tobacco use. Among students who were less than 18 years of age and who were current smokers, one in ten (10.9%) usually got their own cigarettes by buying them in a store or gas station during the past 30 days. The high school students in Yuma were less likely to smoke cigarettes on 20 or more of the 30 days (4.8%) preceding the survey, compared to that (7.5%) of high school students in Arizona. Also, less Yuma (9.2%) high school students tended to smoke daily than Arizona counterparts (12.7%). However, there was no statistically significant difference between Yuma and Arizona high school students pertaining to the prevalence of lifetime cigarette use and current cigarette use (Table 1).

Table 1. Percent of tobacco use among high school students—Youth Risk Behavior Survey, Yuma and Arizona, 2005

Tobacco Use	Yuma		Arizona	
	%	SE*	%	SE
Lifetime cigarette use <sup>1</sup>	59.3	2.1	58.2	1.6
Current cigarette use <sup>2</sup>	19.5	1.5	21.4	0.9
Current frequent cigarette use <sup>3</sup>	4.8	0.7	7.5	0.6
Smoked cigarettes before age 13 years	14.3	1.2	16.3	0.9
Smoked $\geq 10$ cigarettes/day during past month	7.3	1.8	10.1	1.5
Smoked daily during the past month	9.2	0.9	12.7	0.8
Got cigarettes in store 30 days <sup>4</sup>	10.9	2.1	11.4	1.3
Smoked at school during the past month	4.6	0.7	4.7	0.6
Among smokers, tried to quit smoking	51.0	3.6	51.1	2.8

<sup>1</sup> Ever tried cigarette smoking, even one or two puffs.

<sup>2</sup> Smoked cigarettes on  $\geq 1$  of the 30 days preceding the survey.

<sup>3</sup> Smoked cigarettes on  $\geq 20$  of the 30 days preceding the survey.

<sup>4</sup> Among students who are less than 18 years of age and who are current smokers.

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005

### Cigarette Smoking

In Yuma, almost one in five (19.5%) high school students smoked during the past month. Male (23.7%) high school students were more likely to have smoked cigarettes on at least one of the 30 days preceding the survey than females (15.3%). Also, male high school students were more likely to start smoking early, with 18.9 percent of male high school students who smoked cigarettes before age 13 years. Overall, the prevalence of lifetime cigarette use was higher among 10<sup>th</sup> grade (59.8 %), 11<sup>th</sup> grade (57.5%) and 12<sup>th</sup> grade (68.7%) than 9<sup>th</sup> grade (53.2%) students. Students 18 years or older were more likely to have smoked cigarettes on at least one of the 30 days preceding the survey (Table 2).

Table 2. Percent of tobacco use among high school students by selected characteristics—Youth Risk Behavior Survey, Yuma, 2005

Selected Characteristic	Smoked before 13		Lifetime cigarette use <sup>1</sup>		Current Smoker <sup>2</sup>	
	%	SE*	%	SE	%	SE
All	14.3	1.2	59.3	2.1	19.5	1.5
Gender						
Female	9.5	1.2	55.7	2.3	15.3	1.2
Male	18.9	1.8	62.8	2.5	23.7	1.8
Race/Ethnicity						
Non-Hispanic White	19.6	3.0	58.7	3.8	22.4	3.2
Non-Hispanic Black	†15.2	5.2	59.0	7.9	†16.8	5.2
Hispanic or Latino	13.2	1.3	59.7	2.3	18.6	1.7
American Indian	8.2	6.0	59.6	12.1	†22.4	8.9
Other Race	†16.3	8.8	42.3	10.8	15.4	8.4
Multiple Races	†14.8	3.0	60.4	5.4	†24.6	4.3
Grade level						
9th grade	15.6	2.4	53.2	3.8	18.6	2.8
10th grade	15.5	2.2	59.8	3.3	19.9	1.9
11th grade	10.1	1.4	57.5	3.7	16.2	1.8
12th grade	14.0	3.0	68.7	5.0	23.3	3.5
Age group						
15 years or younger	14.8	1.8	52.7	3.2	17.4	2.5
16 or 17 years old	13.4	1.5	61.5	2.6	18.7	1.6
18 years or older	16.1	3.4	70.4	5.4	28.2	4.5

<sup>1</sup> Have ever tried cigarette smoking, even one or two puffs.

<sup>2</sup> Smoked cigarettes on  $\geq 1$  of the 30 days preceding the survey.

† Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

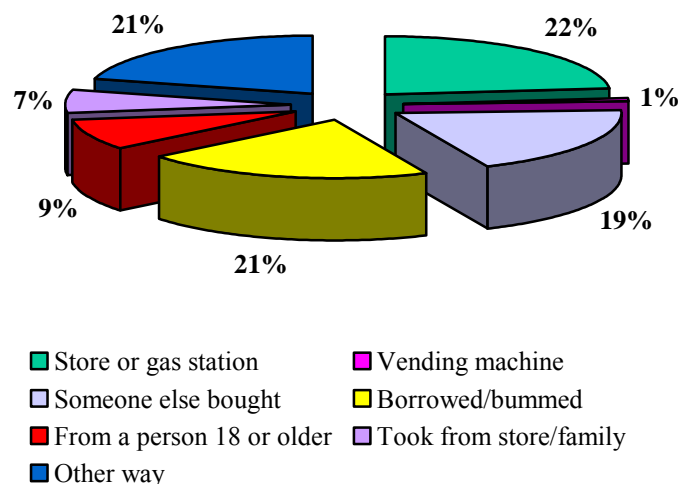
\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

### Where are Students Getting Cigarettes?

Among Yuma high school students who smoked during the past 30 days, most students obtained cigarettes in the following ways: the student purchased his/her own cigarettes from stores, borrowed from someone else, or someone else bought the cigarettes. Few took cigarettes from store/family or used vending machines (Figure 1).

**Figure 1. The access to cigarettes among high school students  
--YRBS, Yuma, 2005**



### Discussion

About 60 percent of Yuma high school students had ever smoked one or two puffs of cigarette. Although more than half of high school student smokers tried to quit, one in five high school students in Yuma County smoked during the past month. Tobacco use put youth at increased risk for developing acute respiratory illness, chronic diseases such as heart disease and cancer, as well as using other illegal drugs. The risk factors associated with initiation of tobacco use among youth include sociodemographic, environmental, and personal factors as following: 1) Low socioeconomic status; 2) Accessibility and availability of tobacco products, cigarette advertising and promotion practices, the price of tobacco products, perceptions that tobacco use is normal, peers' and siblings' use and approval, and lack of parental involvement; 3) Low self-image and low self-esteem, the belief that tobacco use provides a benefit, and the lack of ability to refuse offers to use tobacco.<sup>(1,2,3)</sup>

Smokers find it difficult to quit because of the addiction to nicotine, which usually begins in adolescence. Therefore, in addition to policy changes in health care systems to promote smoking cessation, efforts should be directed to prevent adolescents from starting to smoke, to reduce their access



to tobacco products and reduce their exposure to environmental tobacco smoke. Further reducing the prevalence of tobacco use among adolescents will require continued efforts in: 1) devising targeted and effective media campaigns; 2) reducing depictions of tobacco use in entertainment media; 3) instituting campaigns to discourage family and friends from providing cigarettes to young persons; 4) promoting smoke-free homes; 5) instituting comprehensive school-based programs and policies in conjunction with supportive community activities to prevent smoking initiation and encourage smoking cessation; 6) decreasing the number of adult smokers (e.g., parents) to present more nonsmoking role models.<sup>(1,2)</sup>

The Centers for Disease Control and Prevention (CDC) has developed the following guidelines<sup>(4)</sup> summarizing school-based strategies most likely to be effective in preventing tobacco use among youth:

- Develop and enforce a school policy on tobacco use.
- Provide instruction about the short- and long-term negative physiologic and social consequences of tobacco use, social influences on tobacco use, peer norms regarding tobacco use, and refusal skills.
- Provide tobacco-use prevention education in kindergarten through 12th grade. This instruction should be especially intensive in junior high or middle school and should be reinforced in high school.
- Provide program-specific training for teachers.
- Involve parents or families in support of school-based programs to prevent tobacco use.
- Support cessation efforts among students and all school staff who use tobacco.
- Assess the tobacco-use prevention program at regular intervals.

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**Background**

The importance of healthy eating and physical activity in reducing rates of chronic diseases and death from these diseases has been well established. Development of healthy eating and physical activity habits in childhood that are maintained into adulthood can prevent or delay many chronic diseases. <sup>(1,2)</sup>

Dietary factors are associated with four of the ten leading causes of death: coronary heart disease, some types of cancer, stroke, and type 2 diabetes. Healthy eating habits with higher intakes of fruits and vegetables are associated with a decreased risk of becoming overweight, heart disease and some types of cancer. Consumption of foods with too much saturated fat and calories has been a public health concern. It is essential to have a healthy diet with vegetables, fruits, and grain products that are high in vitamins and minerals, carbohydrates. Calcium is essential for the forming and maintaining healthy bones and teeth. Low calcium intake during the first two to three decades of life put people at risk of developing osteoporosis. <sup>(1,4)</sup>

Regular physical activities helps build and maintain healthy bones and muscles, control weight, build lean muscle, and reduce fat. The Surgeon General's report on physical activity and health concluded that moderate physical activity could substantially reduce the risk of developing or dying from heart disease, diabetes, colon cancer, and high blood pressure. Also, people with other risk factors for coronary heart disease (CHD), such as obesity and hypertension, may particularly benefit from physical activity. In addition, physical activity may protect against lower back pain and some forms of cancer (for example, breast cancer). Over time, regular physical activity decreases the risk of dying prematurely and can increase life expectancy. Furthermore, physical activity can reduce feelings of depression and anxiety and promotes psychological well-being, of particular benefit to adolescents. A study linked sedentary lifestyles to 23 percent of chronic disease-related deaths in the United States (Hahn RA 1990). Television, computer and video games may contribute to adolescents' inactive lifestyles. <sup>(1,5)</sup>

**Overview**

In 2005, less than one fifth (18.3%) of Yuma high school students ate five or more servings of fruits and vegetables per day during the past 7 days preceding the survey. Only 17.8 percent of Yuma high school students had three or more servings per day of dairy products such as milk, yogurt, or cheese during the past 7 days. About one third (35.2%) of Yuma high school students had not participated in sufficient vigorous physical activity and had not participated in sufficient moderate physical activity during the past 7 days preceding the survey. The Centers for Disease Control and Prevention recommends that children and adolescents participate in at least 60 minutes of moderate intensity physical activity most days of the week, preferably daily. However, only 32.1 percent of Yuma high school students were physically active for a total of 60 minutes or more per day on five or more of the 7 days preceding the survey. The prevalence of having had eaten five or more servings of fruits and vegetables was greater among Yuma (18.3%) high school students than those in Arizona (15.2%). Yuma (42.2%) high school

students were more likely to attend physical education classes daily than those of Arizona (26.2%). Yuma (14.7%) high school students were less likely to play computer or video games than those of Arizona (18.6%). However, about 40 percent of Yuma high school students watched three or more hours per day of TV on an average school day, compared to those of Arizona (32.8%) (Table 3).

Table 3. Percent of healthy eating and physical activity behaviors among high school students—Youth Risk Behavior Survey, Yuma and Arizona, 2005

Health Behavior	Yuma		Arizona	
	%	SE*	%	SE
Ate 5-A-Day <sup>1</sup>	18.3	1.1	15.2	1.0
Had $\geq 3$ dairy products per day	17.8	1.1	20.0	1.0
Ate baked food daily	22.3	1.3	21.5	1.0
Drank regular soda daily	27.4	1.4	29.9	1.1
Had sugared beverages daily	21.5	1.3	20.0	1.0
Ate breakfast daily	25.9	1.4	26.4	1.1
Ate fast food daily	10.4	1.0	10.7	1.1
Vigorous physical activity <sup>2</sup>	59.6	1.9	62.5	1.7
Moderate physical activity <sup>3</sup>	28.0	1.4	28.1	1.1
Insufficient physical activity <sup>4</sup>	35.2	2.0	33.1	1.6
No exercise	11.2	1.1	8.7	0.9
Active 60 minutes on $\geq 5$ days	32.1	2.0	32.3	1.4
Enrolled in PE class	48.7	3.5	42.9	2.6
Attended PE class daily	42.2	3.3	26.2	2.6
Exercised $\geq 20$ minutes in PE class	85.0	1.7	84.4	1.6
Played on $\geq 1$ sports teams	46.0	1.8	47.1	1.6
Watched $\geq 3$ hours/day of TV	40.5	1.5	32.8	1.7
Played $\geq 3$ hours/day of computer or video games	14.7	1.1	18.6	1.1

<sup>1</sup> Eat five or more servings of fruits and vegetables.

<sup>2</sup> Physical activities that made them sweat and breathe hard (eg. Basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activity) for  $\geq 20$  minutes on  $\geq 3$  of the 7 days preceding the survey.

<sup>3</sup> Physical activities that did not make them sweat or breathe hard (eg., fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors) for  $\geq 30$  minutes on  $\geq 5$  or more days of the 7 days preceding the survey.

<sup>4</sup> Inadequate physical activities: did not participate in at least 20 minutes of vigorous physical activity on three or more of the days and did not do at least 30 minutes of moderate physical activity on five or more of the past seven days

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

### Healthy Eating and Physical Activity

Overall, the prevalence of having eaten fruits and vegetables five or more time per day was higher among male (19.4%) than female (17.4%) students, higher among Hispanic (18.6%) than Non-Hispanic white (13.5%) students. The prevalence of having had three or more servings or dairy products per day was higher among male (19.2%) than female (16.5%) students, higher among Non-Hispanic white (27.5%) than Hispanic (15.7%) students. The prevalence of having participated in sufficient physical activity was higher among male (69.2%) than female (61.4%) students, higher among Non-Hispanic

white (77.9%) than Hispanic (62.1%) students. The students in 9<sup>th</sup> grade were more likely to eat fruits and vegetables five or more time per day than older high school students. The prevalence of healthy eating behaviors (having eaten five or more fruits and vegetables, having had three or more servings of dairy products) among students 16-17 years were less than that among students of younger or older age groups (Table 4).

Table 4. Healthy eating behaviors and physical activity among high school students by selected characteristics—Youth Risk Behavior Survey, Yuma and Arizona, 2005

Selected Characteristic	5-A-Day <sup>1</sup>		Insufficient P.A. <sup>2</sup>		Had $\geq 3$ dairy per day	
	%	SE*	%	SE	%	SE
All	18.3	1.1	35.2	2.0	17.8	1.1
Gender						
Female	17.4	1.4	39.4	2.5	16.5	1.3
Male	19.4	1.6	30.8	2.8	19.2	1.6
Race/Ethnicity						
Non-Hispanic White	13.5	2.4	22.1	3.9	27.5	3.1
Non-Hispanic Black	28.3	6.6	27.4	6.4	22.9	6.3
Hispanic or Latino	18.6	1.4	37.9	2.1	15.7	1.3
American Indian	25.0	7.3	35.9	9.0	†9.4	5.4
Other Race	†16.3	7.2	†31.1	12.4	†20.7	7.4
Multiple Races	21.9	4.0	33.8	4.4	21.4	4.8
Grade level						
9th grade	21.3	1.6	28.8	3.1	19.6	2.0
10th grade	16.5	2.0	31.7	2.5	16.2	2.4
11th grade	16.8	1.6	39.5	3.5	17.1	1.9
12th grade	18.1	2.7	44.1	4.3	18.5	2.9
Age group						
15 years or younger	19.4	1.5	30.0	2.8	18.2	1.9
16 or 17 years old	16.6	1.6	37.1	2.3	16.3	1.4
18 years or older	21.1	3.6	43.8	5.7	22.3	4.5

<sup>1</sup> Eat five or more servings of fruits and vegetables

<sup>2</sup> Inadequate physical activities: did not participate in at least 20 minutes of vigorous physical activity on three or more days and did not do at least 30 minutes of moderate physical activity on five or more of the past seven days

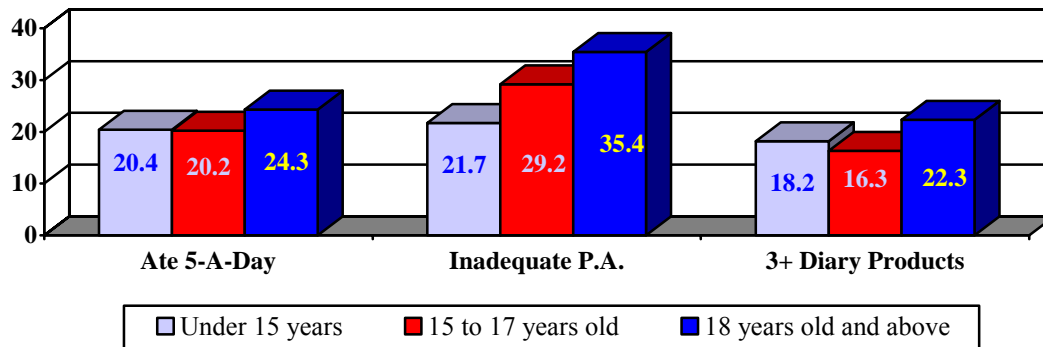
† Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

The prevalence of having participated in sufficient physical activity were lower among older students, ranging from the younger age group of  $\leq 15$  years (70%) to older age groups 16-17 years (62.9%) and  $\geq 18$  years (58.2%), respectively (Figure 2).

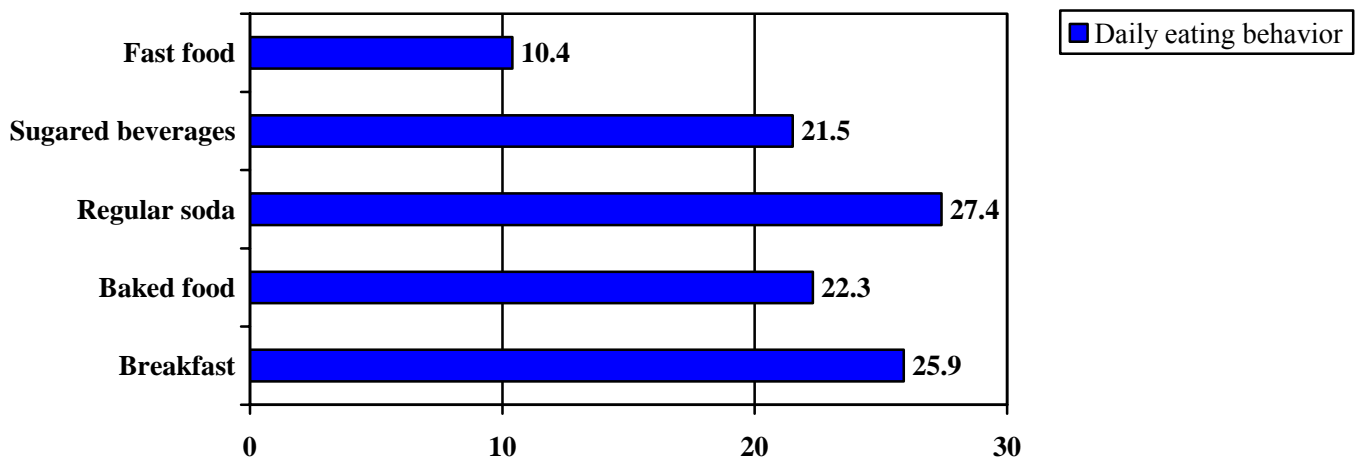
Figure 2. Percent of Healthy Eating Behaviors and Physical Activity by Age Group --YRBS, Yuma, 2005



### Daily Eating Behavior

Overall, only one fourth (25.9%) of Yuma high school students had breakfast everyday in the past 7 days preceding the survey. About one in ten (10.4%) Yuma high school students have had fast food everyday in the past 7 days preceding the survey. Approximately one in five (22.3%) students have had baked food daily during the past 7 days preceding the survey. The prevalence of having at least one serving of regular soda and sugared beverages daily during the past 7 days preceding the survey were 27.4 percent and 21.5 percent respectively (Figure 3).

Figure 3. Percent of Daily Eating Behaviors among High School Students --YRBS, Yuma, 2005



### Participation in Physical Education Class

Overall, less than 50 percent of Yuma high school students were enrolled in Physical Education (PE) class on one or more days in an average week when they were in school. About 42 percent of Yuma high school students went to PE classes 5 days in an average week when they were in school. About 50 percent of students were enrolled in PE class. Of those students, 85 percent actually exercised or played

sports more than 20 minutes during an average PE class. Male (56.6%) high school students were more likely than females (41.6%) to have been enrolled in PE class. The prevalence of having been enrolled in PE class significantly decreased from 77.9 percent among 9<sup>th</sup> grade to 43.8 percent of 10<sup>th</sup> graders. Less than one third of students in 11<sup>th</sup> grade and 12<sup>th</sup> grade were enrolled in PE class. The prevalence of daily PE class attendance followed a similar decreasing pattern among students, from 70.3 percent (9<sup>th</sup> grade) to 21.9% percent (12<sup>th</sup> grade). Nevertheless, about four in five students who enrolled in PE class continued exercising or playing sports for more than 20 minutes during an average PE class (Table 5).

Table 5. Percent of high school students who were enrolled in physical education (PE) class, attended PE class daily, and spent  $\geq 20$  minutes exercising or playing sports during an average PE class, by selected characteristics—Youth Risk Behavior Survey, Yuma, 2005

Selected Characteristic	Enrolled in PE class <sup>1</sup>		Attended PE class daily <sup>2</sup>		Exercised or played sports $\geq 20$ minutes in PE class <sup>3</sup>	
	%	SE*	%	SE	%	SE
All	48.7	3.5	42.2	3.3	85.0	1.7
Gender						
Female	41.6	3.9	38.1	3.8	82.6	2.7
Male	56.6	4.2	46.8	4.0	86.8	2.2
Race/Ethnicity						
Non-Hispanic White	49.5	5.4	44.3	5.8	90.3	2.6
Non-Hispanic Black	63.3	8.8	57.7	9.3	87.2	7.4
Hispanic or Latino	47.2	3.8	40.8	3.5	85.4	1.8
American Indian	53.7	10.6	35.8	8.2	77.0	14.5
Other Race	60.0	11.3	† 43.5	13.1	72.7	16.1
Multiple Races	57.0	6.6	51.7	6.5	77.2	5.9
Grade level						
9th grade	77.9	3.0	70.3	3.4	83.7	2.0
10th grade	43.8	3.0	37.7	2.8	86.8	3.8
11th grade	29.4	3.6	25.1	3.1	89.6	3.0
12th grade	29.7	4.2	21.9	4.4	84.5	4.5
Age group						
15 years or younger	68.6	3.5	61.2	3.7	85.0	1.9
16 or 17 years old	36.4	3.2	31.4	2.8	86.0	2.5
18 years or older	32.7	5.2	22.7	4.8	80.2	5.4

<sup>1</sup> On one or more days in an average week when they were in school.

<sup>2</sup> 5 days in an average week when they were in school.

<sup>3</sup> Exercised or played sports  $\geq 20$  minutes during an average PE class among the students enrolled in PE class.

† Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

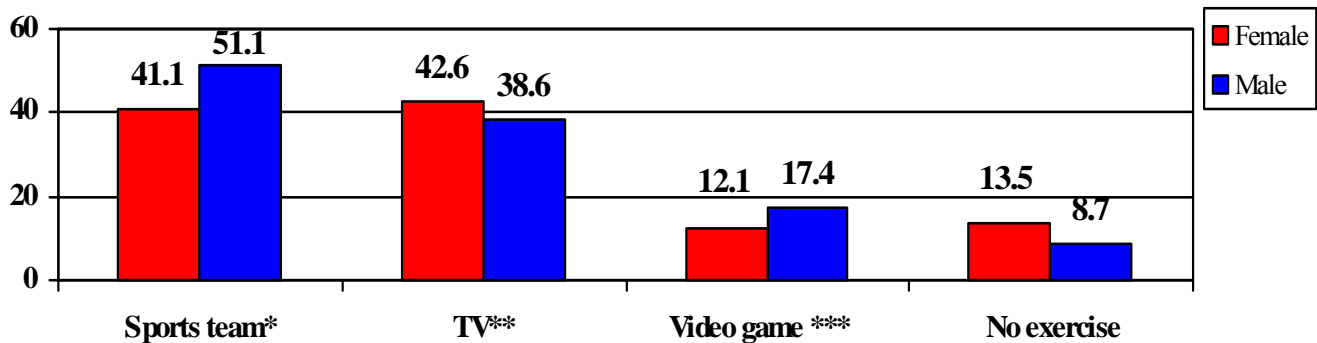
\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

### Other Activities among Yuma High School Students

Overall, 46 percent of Yuma high school students played on one or more sports teams during the 12 months preceding the survey. Male high school students were more likely than female students to play on one or more sports teams (51% vs. 41%). The Percent of students who watched three or more hours per day of TV was similar among male and female students. Male (17.4%) high school students were more likely than female (12.1%) to play video or computer games or use a computer for something that is not school work for three or more hours per day on an average school day. However, female students were more likely to have had not participated in any vigorous or moderate physical activity during the past seven days preceding the survey (Figure 4).

**Figure 4. Activities among High School Students by Gender--YRBS, Yuma, 2005**



\* Played on  $\geq 1$  sports teams

\*\* Watched  $\geq 3$  hours/day TV

\*\*\* Played  $\geq 3$  hours/day Video game

### Discussion

The above results reveal that among Yuma high school students, less than one fifth ate five or more servings of fruits and vegetables and one in three did not meet CDC recommendations for sufficient physical activity. Only 17.8 percent of Yuma high school students had three or more dairy products daily. More than one in five students ate baked food, drank regular soda, and had sugared beverages daily. About 10 percent of students ate fast food daily. However, only one in five students ate breakfast daily. More than 40 percent of Yuma high school students watched three or more hours of TV per day. The current unhealthy eating and physical inactivity behaviors among youth Yuma County place them at risk of premature death from several conditions, including coronary heart disease, some cancers, stroke, diabetes, and depression, as discussed in the background section. To establish healthy eating and physical activity behaviors needs to begin in childhood. Efforts should be focused on preventing chronic diseases associated with diet and weight, strengthening the link between nutrition and physical

activity in health promotion, and improving accessibility of nutrition information, nutrition education, nutrition counseling and related services, and healthful foods in a variety of settings. <sup>(2,6,8)</sup>

To help school-aged children establish healthful eating habits early in life, it is essential to provide them with informative nutrition education. Research suggests that parents who understand proper nutrition can help children in preschool choose healthful foods, but they have less influence on the choices of school-aged children. Thus, the impact of nutrition education on health may be more effective if targeted directly at school-aged children. Nutrition education should be taught as part of a comprehensive school health education program, and essential nutrition education topics should be integrated into science and other curricula to reinforce principles and messages learned in the health units. Nutrition education should be addressed within a school health education objective. Meanwhile, students must have access to healthful food choices to further enhance the likelihood of adopting healthful dietary practices. For these reasons, monitoring students' eating practices at school is important. Policymakers and program planners should provide leadership in fostering healthful diets and physical activity patterns among youths in the community. The family members, health care practitioners, schools, worksites, institutional food services, and the media can play a key role in this process. In addition, food-related businesses can help consumers achieve healthful diets by providing nutrition information for foods purchased in supermarkets, fast-food outlets, restaurants, and carryout operations. Furthermore, it is essential to reduce the consumption of away-from-home foods, since they are generally higher in saturated fat, total fat, cholesterol, and sodium and lower in dietary fiber, iron, and calcium than at-home foods. CDC has developed seven recommendations for school health programs to promote healthy eating. These recommendations address school policy on nutrition, a sequential, coordinated curriculum, appropriate and fun instruction for students, integration of school food service and nutrition education, staff training, family and community involvement, and program evaluation. <sup>(2,3,6,8,9)</sup>

The Guide to Community Preventive Services provides recommendations to promote physical activity in communities <sup>(2,3,9)</sup>:

- Enhance the length or activity levels in Physical education classes taught in schools.
- Interventions focus on changing physical activity behavior through building, strengthening, and maintaining social networks that provide supportive relationships for behavior change.
- Efforts of schools, coalitions, agencies, and communities in attempts to change the local environment to create opportunities for physical activity.

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## Background

In the United States, the prevalence of overweight among adolescents tripled in the last two decades. Although body weight is associated with genetics factor, the lack of physical activity and unhealthy eating habits play an important role in overweight among adolescents. <sup>(1,2)</sup>

In adolescence, obesity is associated with type 2 diabetes, high blood lipids, hypertension, and abnormal glucose tolerance. Early maturation and orthopedic problems also occur with increased frequency in overweight youth. Childhood overweight is associated with adverse psychological and social consequences, specifically discrimination. In addition, overweight and obesity acquired during childhood or adolescence may persist into adulthood and increase the risk later in life for coronary heart disease, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints. In addition, studies have shown high rates of body dissatisfaction and dieting among adolescent females, with many engaging in unhealthy weight control behaviors, such as fasting and self-induced vomiting, which can lead to adverse consequences on their physical and psychological development. <sup>(1,2,5)</sup>

## Overview

Yuma (19.6%) high school students were more likely to be overweight than those of Arizona (11.9%). About one in three (35.5%) Yuma students were at or above 85<sup>th</sup> percentile for sex and age specific Body Mass Index (BMI)—overweight or at risk of becoming overweight. Overall, 34.4 percent of Yuma students considered themselves as slightly overweight or overweight. Some students tried to lose weight through eating less food or exercising more during the past month preceding the survey. Other students tried other unhealthy methods to lose weight (Table 6).

Table 6. Percent of healthy eating and physical activity behaviors among high school students—Youth Risk Behavior Survey, Yuma and Arizona, 2005

Health Behavior	Yuma		Arizona	
	%	SE*	%	SE
Overweight <sup>1</sup>	19.6	1.4	11.9	1.0
At risk of becoming overweight <sup>2</sup>	15.9	1.1	13.6	0.9
Self-perceived overweight	34.4	1.5	32.0	1.0
Tried to lose weight	52.8	1.7	45.9	1.2
Ate less food to lose weight	44.2	1.4	39.3	1.3
Exercised to lose weight during the past month	64.4	1.2	60.7	1.3
Fasting $\geq$ 24 hours to lose weight	14.5	1.0	14.5	1.1
Took diet pills, powders or liquids to lose weight	7.7	1.0	7.9	0.6
Vomited/took laxatives to lose weight	8.4	1.0	6.6	0.6

<sup>1</sup> Students who were at or above 95<sup>th</sup> percentile for sex- and age-specific Body Mass Index (BMI)

<sup>2</sup> Students who were at or above 85<sup>th</sup> percentile but less than 95<sup>th</sup> percentile for sex- and age-specific BMI.

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

**Overweight**

Male high school students were more likely to be overweight than females (25.4% vs. 13.4%). The prevalence of both overweight and at risk of becoming overweight was higher among Hispanic (21.4% and 16.5%) high school students than Non-Hispanic white (12.5% and 11.1%) students (Table 7).

Table 7. Percent of overweight and at risk of overweight high school students by selected characteristics—Youth Risk Behavior Survey, Yuma, 2005

Selected Characteristic	Overweight <sup>1</sup>		At risk of overweight <sup>2</sup>	
	%	SE*	%	SE
All	19.6	1.4	15.9	1.1
Gender				
Female	13.4	1.4	16.8	1.4
Male	25.4	2.2	15.0	1.6
Race/Ethnicity				
Non-Hispanic White	12.5	2.2	11.1	1.8
Non-Hispanic Black	31.7	9.3	†25.7	9.4
Hispanic or Latino	21.4	1.7	16.5	1.4
American Indian	†19.0	9.3	†22.4	10.4
Other Race	†9.7	7.3	†10.9	6.4
Multiple Races	†10.8	3.5	17.3	4.0
Grade level				
9th grade	18.5	3.0	16.9	1.9
10th grade	21.0	2.7	19.4	1.8
11th grade	18.0	2.3	14.4	1.6
12th grade	21.0	2.9	11.3	2.0
Age group				
15 years or younger	20.8	2.6	16.6	1.7
16 or 17 years old	17.9	1.6	17.1	1.5
18 years or older	22.5	3.8	†9.6	2.9

<sup>1</sup> Students who were at or above 95<sup>th</sup> percentile for sex- and age-specific Body Mass Index (BMI)

<sup>2</sup> Students who were at or above 85<sup>th</sup> percentile but less than 95<sup>th</sup> percentile for sex- and age-specific BMI.

† Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

**Self-perception of Overweight and Intention to Lose Weight**

Overall, about one third (34.4%) of high school students in Yuma described themselves as overweight. Female (40.4%) students were more likely to consider themselves as overweight than male (28.5%). It was interestingly noted that the proportion of self-perceived overweight among Non-Hispanic white (35.7%) was similar to Hispanic (34.6%) students. Also, females (65.6%) were more likely to have

intention to lose weight than male (40.3%) students. Again, the proportion of students who were trying to lose weight among Non-Hispanic white (53.2%) was similar to Hispanic (53.6%) students (Table 8).

Table 8. Percent of self-perceived overweight and intention to lose weight among high school students by selected characteristics—Youth Risk Behavior Survey, Yuma, 2005

Selected Characteristic	Self-perceived overweight <sup>1</sup>		Intention to lose weight <sup>2</sup>	
	%	SE*	%	SE
All	34.4	1.5	52.8	1.7
Gender				
Female	40.4	1.9	65.6	2.0
Male	28.5	1.9	40.3	2.3
Race/Ethnicity				
Non-Hispanic White	35.7	2.9	53.2	4.0
Non-Hispanic Black	43.2	9.4	55.8	7.3
Hispanic or Latino	34.6	1.7	53.6	1.9
American Indian	† 21.3	6.8	† 33.9	10.3
Other Race	† 17.6	7.4	† 42.0	13.5
Multiple Races	30.5	4.5	49.7	5.3
Grade level				
9th grade	29.8	2.5	49.9	2.4
10th grade	36.9	2.6	58.2	2.7
11th grade	41.0	2.5	55.0	2.5
12th grade	31.7	3.2	47.9	5.6
Age group				
15 years or younger	32.6	2.5	52.2	2.4
16 or 17 years old	36.6	1.8	54.8	2.3
18 years or older	32.1	4.1	47.1	4.5

<sup>1</sup> Students who described themselves as slightly or very overweight.

<sup>2</sup> Students who were trying to lose weight.

† Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

### Weight control behaviors

Overall, more than 52 percent of Yuma high school students tried to lose weight. Female (65.6%) students were more likely to try to control their weight than male (40.3%) during the past 30 days preceding the survey. The prevalence of healthy behaviors for weight control among Yuma high school students were 44.2 percent who ate less food or calories and 64.4 percent who exercised (Table 9). However, some students tried to control weight through unhealthy behaviors including fasting (14.5%), taking pills (7.7%) without a physician's advice, and vomiting/taking laxatives (8.4%) (Table 6).

Table 9. Percent of weight control behaviors among high school students by selected characteristics—Youth Risk Behavior Survey, Yuma, 2005

Selected Characteristic	Ate less to lose weight		Exercised to lose weight	
	%	SE*	%	SE
All	44.2	1.4	64.4	1.2
Gender				
Female	53.8	1.9	68.7	1.5
Male	34.8	1.8	60.3	2.0
Race/Ethnicity				
Non-Hispanic White	45.4	3.1	68.9	2.9
Non-Hispanic Black	38.8	7.3	56.1	8.7
Hispanic or Latino	44.5	1.6	64.9	1.4
American Indian	43.3	11.8	48.9	11.0
Other Race	†27.4	10.9	45.1	13.2
Multiple Races	43.6	6.1	57.8	6.2
Grade level				
9th grade	43.2	2.9	65.3	2.1
10th grade	46.5	2.2	69.0	2.1
11th grade	42.4	2.9	62.9	2.4
12th grade	44.5	3.8	58.7	3.9
Age group				
15 years or younger	45.4	2.6	67.0	2.1
16 or 17 years old	44.4	1.9	64.6	1.8
18 years or older	40.2	4.4	55.6	4.8

† Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

## Discussion

One third of Yuma high school students were overweight or at risk of becoming overweight, though it was shown that Yuma high school students ate healthier, and were more likely to attend physical education class daily than their counterparts in Arizona (in section 2 Nutrition and Physical Activity). Although Yuma high school students were more likely to have intention to lose weight by eating less food or through exercise, the prevalence of overweight high school students in Yuma was much higher (19.6%) than Arizona (11.9%) students. This discrepancy between healthy behaviors and health status may be due to the fact that it takes longer to alternate the poor health status (overweight) than changing risk behaviors through interventions (University of Arizona Border Health ;SI/ initiated a few interventions in Yuma and the Steps program started in 2003). Another speculation was that though Yuma high school students may eat fruits and vegetables, the portion sizes were really large and/or the diet contained a greater portion of fat (e.g., eat whole milk, rather than low fat milk, due to limited

availability at the border county supermarkets, etc.). In addition, more Yuma high school students watched 3 hours of TV per day than Arizona students which may lead to sedentary lifestyle and high calorie intake from TV snacks, which may contribute to obesity among high school students.

Obesity has psychosocial consequences and it also contributes to developing type 2 diabetes, hypertension and hyperlipidimia. Obesity prevention involves a focus on energy balance—calories consumed versus intake calories expended. Although about half of students tried to lose weight through eating less or exercise, a big proportion of students (34.4%) tried to vomit or took laxatives and some tried more than 24 hours of fasting or took diet pills to lose weight. It is important to promote healthy weight among high school students through health education on self-assessment of healthy weight and healthy weight control behaviors. Studies show that replacing foods of high energy density (high calories per weight of food) with foods of lower energy density, such as fruits and vegetables, can be an important part of a weight management strategy. To maintain weight loss, healthful dietary habits must be coupled with decreased sedentary behavior and increased physical activity as a permanent lifestyle. Additionally, changes in the physical and social environment may help persons maintain the necessary long-term lifestyle that influence both diet and physical activity. Although it appears straightforward, these factors result from complex interactions across a number of social, environmental, and policy contexts. American children live in a society that has changed dramatically in the three decades over which the obesity epidemic has developed. <sup>(1,2,3,5)</sup>

The Institute of Medicine’s Committee on Prevention of Obesity in Children and Youth recommends the following strategies to combat the battle of reducing children obesity <sup>(4)</sup>:

1. Industry and media:
  - Develop healthier food and beverage product and packaging innovations
  - Expand consumer nutrition information
  - Provide clear and consistent media messages
2. State and local governments:
  - Expand and promote opportunities for physical activity in the community through changes to ordinances, capital improvement programs, and other planning practices
  - Work with communities to support partnerships and networks that expand the availability of and access to healthful foods
3. Health care professionals:
  - Routinely track body mass index (BMI) in children and youth and offer appropriate counseling and guidance to children and their families
4. Community and nonprofit organizations:
  - Provide opportunities for healthful eating and physical activity in existing and new community programs, particularly for high-risk populations
5. State and local education authorities and schools:

- Improve the nutritional quality of foods and beverages served and sold in schools and as part of school-related activities
  - Increase opportunities for frequent, more intensive, and engaging physical activity during and after school
  - Implement school-based interventions to reduce children's screen time
  - Develop, implement, and evaluate innovative pilot programs for both staffing and teaching about wellness, healthful eating, and physical activity
6. Parents and families:
- Engage in and promote more healthful dietary intakes and active lifestyles (e.g., increased physical activity, reduced television and other screen time, more healthful dietary behaviors)

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## Background

Asthma is a chronic lung disease characterized by episodes of inflammation and narrowing of small airways, which can cause wheezing, difficulty in breathing, and chest pain. Environmental factors such as air pollution and second hand tobacco smoke, along with infections, exercise and allergens can trigger asthma attacks in children who have the disease. <sup>(3,4,5,6)</sup>

Asthma is the most common cause of chronic illness and disability in children. It is the third-ranking cause of hospitalization among children under 15 (Popovic JC. 1999) and one of the leading causes of school absenteeism (CDC 2004). Asthma attacks can cause considerable discomfort and anxiety in both children and their families and may limit athletic and other activities. However, most of the problems caused by asthma could be averted if students with asthma and their health care providers managed the disease according to established guidelines. <sup>(1,2,5,6,7,11)</sup>

## Overview

Overall, 18.9 percent of Yuma high school students were ever told by a doctor or nurse that they had asthma. Approximately one in seven Yuma high school students (13.9%) reported that they had current asthma. These include students with active asthma symptoms and those whose asthma was well controlled. About one third of children who had current asthma experienced one or more asthma attacks during the 12 months preceding the survey. Compared with Arizona high school students (17.2%), Yuma high school students (13.9%) were less likely to have current asthma (Table 10).

Table 10. Percent of lifetime asthma, current asthma and asthma episodes or attacks among high school students—Youth Risk Behavior Survey, Yuma and Arizona, 2005

Health Behavior	Yuma		Arizona	
	%	SE*	%	SE
Lifetime asthma <sup>1</sup>	18.9	1.5	21.8	0.8
Current asthma <sup>2</sup>	13.9	1.3	17.2	0.8
Asthma episode or attack <sup>3</sup>	37.0	3.1	41.0	3.5

<sup>1</sup> Student was ever told by a doctor or nurse that the student had asthma (n=292)

<sup>2</sup> Student reported lifetime asthma and reported that during the 12 months preceding the survey, the student either had asthma but not episode or attack or had an asthma episode or attack (n=216)

<sup>3</sup> Among students with current asthma, had an asthma episode or attack during the 12 months preceding the survey (n=79)

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005

The prevalence of lifetime asthma and current asthma were similar between male and female high school students in Yuma County. Significantly fewer Hispanic high school students than Non-Hispanic white high school students reported lifetime asthma (16.3% vs. 26.7%). Also, Yuma Hispanic high school students (11.8%) were less likely to have current asthma than Non-Hispanic White high school students (20.8%). Among Yuma high school students with current asthma, females (48.1%) tended to



have greater prevalence of asthma episodes or attacks than males (27.2%) during the 12 months preceding the survey (Table 11).

Table 11. Percent of high school students reporting lifetime asthma, current asthma, and asthma episode or attack, by selected characteristics—Youth Risk Behavior Survey, Yuma, 2005

Selected Characteristic	Lifetime asthma <sup>1</sup>		Current asthma <sup>2</sup>		Asthma episode or attack <sup>3</sup>	
	%	SE*		SE	%	SE
All	18.9	1.5	13.9	1.3	37.0	3.1
Gender						
Female	17.5	1.6	13.0	1.4	48.1	4.4
Male	20.2	1.9	15.0	1.8	27.2	3.8
Race/Ethnicity						
Non-Hispanic White	26.7	3.4	20.8	3.2	41.1	8.7
Non-Hispanic Black	33.5	7.9	23.5	6.1	52.1	13.1
Hispanic or Latino	16.3	1.5	11.8	1.3	37.9	3.7
American Indian	39.7	10.1	†32.6	9.8	†23.6	17.2
Other Race	†7.4	4.8	†7.4	4.8	†24.2	22.8
Multiple Races	23.2	5.2	17.1	4.0	†20.6	8.6
Grade level						
9th grade	20.4	2.1	†38.4	23.3	48.6	6.4
10th grade	19.8	2.2	15.3	1.8	40.0	4.7
11th grade	19.8	2.2	14.1	2.3	†20.5	7.3
12th grade	13.9	3.2	14.3	1.8	29.7	7.5
Age group						
15 years or younger	19.2	1.7	14.6	1.5	49.5	5.4
16 or 17 years old	18.7	1.8	13.6	1.6	32.0	5.4
18 years or older	18.3	5.2	†13.2	5.0	15.4	1.8

<sup>1</sup> Student was ever told by a doctor or nurse that the student had asthma (n=292)

<sup>2</sup> Student reported lifetime asthma and reported that during the 12 months preceding the survey, the student either had asthma but not an episode or attack or had an asthma episode or attack (n=216)

<sup>3</sup> Among students with current asthma, had an asthma episode or attack during the 12 months preceding the survey (n=79)

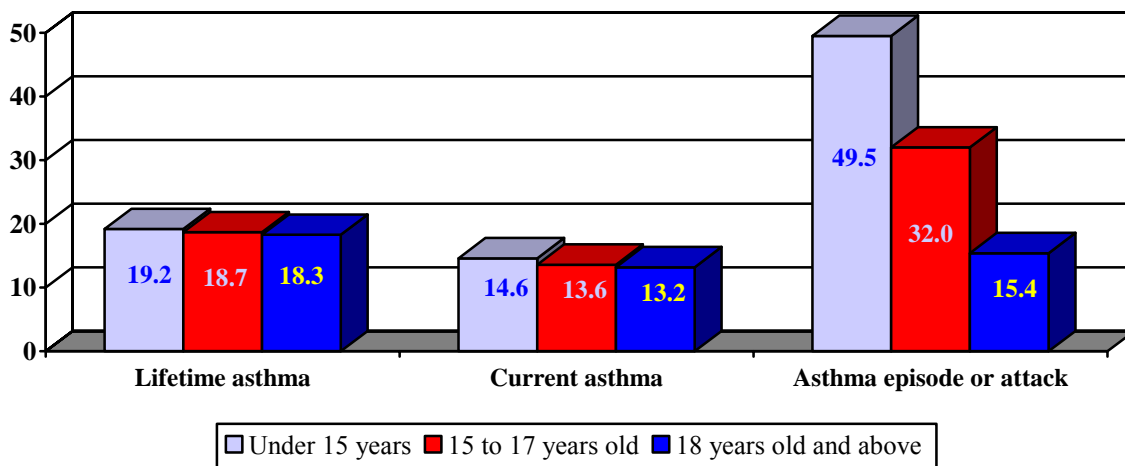
† Estimates preceded by an asterisk have a relative standard error of 30% or higher should be used with caution, as they do not meet the standard of reliability or precision.

\*Standard Error

DATA SOURCE: Arizona Youth Risk Behavior Survey, 2005.

Although the prevalence of lifetime asthma and current asthma were similar among Yuma high school students across different age groups, the older high school students were less likely to have had an asthma episode or attack than the younger students during the 12 months preceding the survey. This may indicate that asthma among older high school students with current asthma was better controlled compared to the asthma among younger high school students in Yuma County (Figure 6).

Figure 5. Prevalence of Asthma by Age Group--YRBS, Yuma, 2005



### Discussion

About twenty percent of Yuma high school students were ever informed by a doctor or nurse that they had asthma and 13.9 percent of Yuma high school students reported that they had current asthma. Children with ongoing asthma symptoms are at risk for poor health outcomes, including hospitalizations and death. The findings underscore the need for health-care providers; schools, families, and public health practitioners to coordinate efforts that will help students manage their asthma and be prepared to respond to asthma-related emergency situations. <sup>(4,6)</sup>

The rapid industrialization, unpaved roads, busy traffic, and exposure to pesticides are environmental hazards that need to be controlled to reduce children's asthma due to these environmental triggers related to asthma at border communities. In the meantime, action should be taken to control children's asthma. Schools can help improve asthma management among students whose asthma is not well controlled by providing health services, education, and control of environmental triggers. The Centers for Disease Control and Prevention (CDC), other federal agencies, the National Asthma Education and Prevention Program, and national nongovernmental organizations have developed resources to support asthma management activities at schools. CDC's Strategies for Addressing Asthma Within a Coordinated School Health Program recommends research-based activities for schools to help students manage their asthma, such as obtaining a written asthma action plan for all students with asthma, ensuring that those with asthma receive education on asthma basics, asthma management, and emergency response, and prohibiting tobacco use at all times among students, staff, and visitors to schools. Students, families, schools, and health-care and public health practitioners working together can improve asthma management among students. <sup>(4,5,6,9,10)</sup>

The prevalence of lifetime asthma and current asthma were similar among Yuma high school students across different age groups. Older high school students were less likely to have had asthma episode or

attack than the younger students. This difference indicates the necessity of combining effective management of the disease with asthma prevention.

Effective management of asthma comprises four major components: controlling exposure to factors that trigger asthma episodes, adequately managing asthma with appropriate medicine, monitoring the disease by using objective measures of lung function, and educating parents/family of children with asthma to become partners in managing the disease. Efforts are essential to intervene the progressing stages from disease to functional limitation and disability and to improve the quality of life for persons with asthma.

CDC has identified six strategies for schools and districts to consider when addressing asthma within a coordinated school health program. These strategies can be effective whether the program targets the entire school district or just one school. <sup>(1,8,9,10,11)</sup>

- Establish management and support systems for asthma-friendly schools.
- Provide appropriate school health and mental health services for students with asthma.
- Provide asthma education and awareness programs for students and school staff.
- Provide a safe and healthy school environment to reduce asthma triggers.
- Provide safe, enjoyable physical education and activity opportunities for students with asthma.
- Coordinate school, family, and community efforts to better manage asthma symptoms and reduce school absences among students with asthma.

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## Background

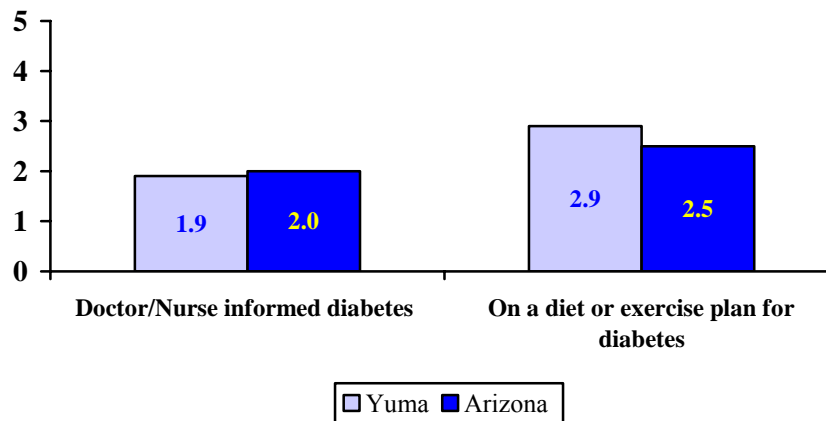
Diabetes is a disease in which blood glucose levels are above normal. Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations. Diabetes was the 7th leading cause of death among all Arizonians in 2004. Diabetes is one of the most common chronic diseases in children and adolescents. When diabetes strikes during childhood, it is routinely assumed to be type 1, or juvenile-onset diabetes. However, recent reports shows that type 2 diabetes (formerly known as adult-onset diabetes) has been reported with increasing prevalence among overweight children, particularly in American Indians, African Americans, and Hispanic/Latino Americans. American Indian youths have the highest prevalence of type 2 diabetes. <sup>(1,2,3,)</sup>

Diabetes can be managed through lifestyle changes and medication. Before people develop type 2 diabetes, they almost always have "pre-diabetes" – blood glucose levels that are higher than normal but not yet high enough to be diagnosed as diabetes. American Diabetes Association estimated that one in six overweight adolescents aged 12-19 have pre-diabetes. Pre-diabetes can be treated and people with pre-diabetes can prevent the development of type 2 diabetes by making changes in their diet and increasing their level of physical activity. They may even be able to return their blood glucose levels to the normal range. <sup>(1,3,4)</sup>

## Overview

Overall, about two percent of Yuma high school students were informed that they had diabetes by a doctor or nurse. Three percent of Yuma high school students were on a special diet or exercise plan because of their diabetes.

**Figure 6. Prevalence Percent of Diabetes and Plan for Diabetes among High School Students --YRBS, Yuma and Arizona, 2005**



## Discussion

The epidemics of obesity and the low level of physical activity may be major contributors to the increase in type 2 diabetes among youth. While some medications may delay the development of diabetes, diet

and exercise are the key components for primary intervention of diabetes. Studies show that people at high risk for type 2 diabetes can prevent or delay the onset of the disease by losing 5 to 7 percent of their body weight. Just 30 minutes a day of moderate physical activity, coupled with a 5 to 10 percent of reduction in body weight, produced a 58 percent of reduction in diabetes.

About one-third of all people with diabetes have not been diagnosed (American Diabetes Association). Children and adolescents diagnosed with type 2 diabetes are generally between 10 and 19 years old, obese, with a strong family history of type 2 diabetes, and have insulin resistance. It is critical to identify diabetes-related health problems and pre-diabetes conditions among at-risk children. Physicians and parents should be aware of and monitor children's pre-diabetes conditions to provide training on diabetes prevention and control. <sup>(1,3,4,5,6)</sup>

Generally, children and adolescents with type 2 diabetes have poor glycemic control. The Task Force on Community Preventive Services recommended healthcare system interventions to optimize care and diabetes self-management education interventions in community settings to increase glycemic control among patients with diabetes. Early diagnosis, screening for the complications and disease/case management of diabetes are crucial to reducing morbidity and mortality and improve quality of life for children with diabetes. Furthermore, standard case definition(s), guidelines for treatment, and approval of oral hypoglycemic agents (to lower blood sugar) are urgently required for children and adolescents. <sup>(4,5,6)</sup>

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The findings in this report are subject to at least four limitations. First, these data apply only to adolescents enrolled in high school. The survey is not reflective of the adolescents who are not enrolled in high school or those students who may be schooled at home in Yuma County. Nationwide, in 2001, among persons aged 16-17 years, approximately 5% were not enrolled in a high school program and had not completed high school (currently, county data for such information is not available). Second, the extent of underreporting or over-reporting of health behaviors in YRBS cannot be determined, although the survey questions demonstrate test and retest reliability. Also, the extent of underreporting or overreporting of self-reported health status in YRBS such as asthma and diabetes cannot be determined and were not confirmed by medical records. Third, overweight prevalence estimates derived from self-reported data are likely to be low. However, prevalence trends from national surveys of adults using self-reported height and weight have been consistent with trends (data from national surveys using measured heights and weights). Nevertheless, the overweight prevalence estimates from self-reported height and weight can be useful in tracking trends over time. In addition, the survey is conducted in the selected high schools during the school day. As a result, the survey may not capture those students who are chronically absent from school. Furthermore, the survey was conducted in the spring season, which may not reflect the dramatic environmental change that will impact on physical activity during the summer season in Arizona.

# 2005 State and Local Youth Risk Behavior Survey

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Fill in the ovals completely. When you are finished, follow the instructions of the person giving you the survey.

***Thank you very much for your help.***

**Directions**

- Use a #2 pencil only.
- Make dark marks.
- Fill in a response like this: A B ● D.
- To change your answer, erase completely.
- Choose only one answer for each question (except question 4).

1. How old are you?  
A. 12 years old or younger  
B. 13 years old  
C. 14 years old  
D. 15 years old  
E. 16 years old  
F. 17 years old  
G. 18 years old or older
2. What is your sex?  
A. Female  
B. Male
3. In what grade are you?  
A. 9th grade  
B. 10th grade  
C. 11th grade  
D. 12th grade  
E. Ungraded or other grade
4. How do you describe yourself?  
**(Select one or more responses.)**  
A. American Indian or Alaska Native  
B. Asian  
C. Black or African American  
D. Hispanic or Latino  
E. Native Hawaiian or Other Pacific Islander  
F. White

5. How do you describe your health in general?

- A. Excellent
- B. Very good
- C. Good
- D. Fair
- E. Poor

6. How tall are you without your shoes on?

Directions: Write your height in the shaded blank boxes. Fill in the matching oval below each number.

Example

HEIGHT	
Feet	Inches
5	11
③	⑩
④	①
●	②
⑥	③
⑦	④
	⑤
	⑥
	⑦
	⑧
	⑨
	⑩
	●



7. How much do you weigh without your shoes on?

Directions: Write your weight in the shaded blank boxes. Fill in the matching oval below each number.

Example

Weight		
Pounds		
1	5	3
●	①	①
②	①	①
③	②	②
	③	●
	④	④
	●	⑤
	⑥	⑥
	⑦	⑦
	⑧	⑧
	⑨	⑨

8. How long have you been going to this school?
- Less than a month
  - 1 to 3 months
  - 4 to 6 months
  - 7 to 9 months
  - 10 to 12 months
  - More than a year
9. During the past 12 months, how would you describe your grades in school?
- Mostly A's
  - Mostly B's
  - Mostly C's
  - Mostly D's
  - Mostly F's
  - None of these grades
  - Not sure

The next 4 questions ask about personal safety.

10. **When you rode a bicycle** during the past 12 months, how often did you wear a helmet?
- I did not ride a bicycle during the past 12 months
  - Never wore a helmet
  - Rarely wore a helmet
  - Sometimes wore a helmet
  - Most of the time wore a helmet
  - Always wore a helmet
11. How often do you wear a seat belt when **riding in** a car driven by someone else?
- Never
  - Rarely
  - Sometimes
  - Most of the time
  - Always
12. During the past 30 days, how many times did you **ride** in a car or other vehicle **driven by someone who had been drinking alcohol**?
- 0 times
  - 1 time
  - 2 or 3 times
  - 4 or 5 times
  - 6 or more times
13. During the past 30 days, how many times did you **drive** a car or other vehicle **when you had been drinking alcohol**?
- 0 times
  - 1 time
  - 2 or 3 times
  - 4 or 5 times
  - 6 or more times

**The next 11 questions ask about violence-related behaviors.**

14. During the past 30 days, on how many days did you carry **a weapon** such as a gun, knife, or club?
- A. 0 days
  - B. 1 day
  - C. 2 or 3 days
  - D. 4 or 5 days
  - E. 6 or more days
15. During the past 30 days, on how many days did you carry **a gun**?
- A. 0 days
  - B. 1 day
  - C. 2 or 3 days
  - D. 4 or 5 days
  - E. 6 or more days
16. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club **on school property**?
- A. 0 days
  - B. 1 day
  - C. 2 or 3 days
  - D. 4 or 5 days
  - E. 6 or more days
17. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?
- A. 0 days
  - B. 1 day
  - C. 2 or 3 days
  - D. 4 or 5 days
  - E. 6 or more days

18. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club **on school property**?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times
19. During the past 12 months, how many times has someone stolen or deliberately damaged your property such as your car, clothing, or books **on school property**?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times
20. During the past 12 months, how many times have you been harassed or bullied **on school property**?
- A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times

21. During the past 12 months, how many times were you in a physical fight?
  - A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times
22. During the past 12 months, how many times were you in a physical fight **on school property**?
  - A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or 7 times
  - F. 8 or 9 times
  - G. 10 or 11 times
  - H. 12 or more times
23. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?
  - A. Yes
  - B. No
24. Have you ever been physically forced to have sexual intercourse when you did not want to?
  - A. Yes
  - B. No

**The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide that is, taking some action to end their own life.**

25. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in a row** that you stopped doing some usual activities?
  - A. Yes
  - B. No
26. During the past 12 months, did you ever **seriously** consider attempting suicide?
  - A. Yes
  - B. No
27. During the past 12 months, did you make a plan about how you would attempt suicide?
  - A. Yes
  - B. No
28. During the past 12 months, how many times did you actually attempt suicide?
  - A. 0 times
  - B. 1 time
  - C. 2 or 3 times
  - D. 4 or 5 times
  - E. 6 or more times

29. **If you attempted suicide** during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?
- A. **I did not attempt suicide** during the past 12 months
  - B. Yes
  - C. No

**The next 8 questions ask about tobacco use.**

30. Have you ever tried cigarette smoking, even one or two puffs?
- A. Yes
  - B. No
31. How old were you when you smoked a whole cigarette for the first time?
- A. I have never smoked a whole cigarette
  - B. 8 years old or younger
  - C. 9 or 10 years old
  - D. 11 or 12 years old
  - E. 13 or 14 years old
  - F. 15 or 16 years old
  - G. 17 years old or older
32. During the past 30 days, on how many days did you smoke cigarettes?
- A. 0 days
  - B. 1 or 2 days
  - C. 3 to 5 days
  - D. 6 to 9 days
  - E. 10 to 19 days
  - F. 20 to 29 days
  - G. All 30 days

33. During the past 30 days, on the days you smoked, how many cigarettes did you smoke **per day**?
- A. I did not smoke cigarettes during the past 30 days
  - B. Less than 1 cigarette per day
  - C. 1 cigarette per day
  - D. 2 to 5 cigarettes per day
  - E. 6 to 10 cigarettes per day
  - F. 11 to 20 cigarettes per day
  - G. More than 20 cigarettes per day
34. During the past 30 days, how did you **usually** get your own cigarettes? (Select only **one** response.)
- A. I did not smoke cigarettes during the past 30 days
  - B. I bought them in a store such as a convenience store, supermarket, discount store, or gas station
  - C. I bought them from a vending machine
  - D. I gave someone else money to buy them for me
  - E. I borrowed (or bummed) them from someone else
  - F. A person 18 years old or older gave them to me
  - G. I took them from a store or family member
  - H. I got them some other way

35. During the past 30 days, on how many days did you smoke cigarettes **on school property**?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

36. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?

- A. Yes
- B. No

37. During the past 12 months, did you ever try **to quit** smoking cigarettes?

- A. I did not smoke during the past 12 months
- B. Yes
- C. No

**The next 4 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.**

38. How old were you when you had your first drink of alcohol other than a few sips?

- A. I have never had a drink of alcohol other than a few sips
- B. 8 years old or younger
- C. 9 or 10 years old
- D. 11 or 12 years old
- E. 13 or 14 years old
- F. 15 or 16 years old
- G. 17 years old or older

39. During the past 30 days, on how many days did you have at least one drink of alcohol?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

40. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 to 5 days
- E. 6 to 9 days
- F. 10 to 19 days
- G. 20 or more days

41. During the past 30 days, on how many days did you have at least one drink of alcohol **on school property**?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

**The next 4 questions ask about marijuana use. Marijuana is also called grass or pot.**

42. During your life, how many times have you used marijuana?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 to 99 times
  - G. 100 or more times
43. How old were you when you tried marijuana for the first time?
- A. I have never tried marijuana
  - B. 8 years old or younger
  - C. 9 or 10 years old
  - D. 11 or 12 years old
  - E. 13 or 14 years old
  - F. 15 or 16 years old
  - G. 17 years old or older
44. During the past 30 days, how many times did you use marijuana?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
45. During the past 30 days, how many times did you use marijuana **on school property**?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times

**The next 12 questions ask about other drugs.**

46. During your life, how many times have you used **any** form of cocaine, including powder, crack, or freebase?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
47. During the past 30 days, how many times did you use **any** form of cocaine, including powder, crack, or freebase?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
48. During the past 30 days, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times

49. During your life, how many times have you used **heroin** (also called smack, junk, or China White)?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
50. During your life, how many times have you used **methamphetamines** (also called speed, crystal, crank, or ice)?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
51. During the past 30 days, how many times have you used **methamphetamines** (also called speed, crystal, crank, or ice)?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
52. During your life, how many times have you used **ecstasy** (also called MDMA)?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
53. During your life, how many times have you taken **steroid pills or shots** without a doctor's prescription?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times
54. During your life, how many times have you used a needle to inject any **illegal** drug into your body?
- A. 0 times
  - B. 1 time
  - C. 2 or more times
55. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?
- A. Yes
  - B. No
56. During the past 30 days, how many times have you taken **over-the-counter drugs** to get high?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times

57. During the past 30 days, how many times have you taken a **prescription drug** such as Ritalin, Adoral, or Zanax without a doctor's prescription?
- A. 0 times
  - B. 1 or 2 times
  - C. 3 to 9 times
  - D. 10 to 19 times
  - E. 20 to 39 times
  - F. 40 or more times

**The next 9 questions ask about sexual behavior.**

58. Have you ever had sexual intercourse?
- A. Yes
  - B. No
59. How old were you when you had sexual intercourse for the first time?
- A. I have never had sexual intercourse
  - B. 11 years old or younger
  - C. 12 years old
  - D. 13 years old
  - E. 14 years old
  - F. 15 years old
  - G. 16 years old
  - H. 17 years old or older
60. The first time you had sexual intercourse, how old was your partner?
- A. I have never had sexual intercourse
  - B. 5 or more years younger
  - C. 3 to 4 years younger
  - D. About the same age
  - E. 3 to 4 years older
  - F. 5 or more years older

61. During your life, with how many people have you had sexual intercourse?
- A. I have never had sexual intercourse
  - B. 1 person
  - C. 2 people
  - D. 3 people
  - E. 4 people
  - F. 5 people
  - G. 6 or more people

62. During the past 3 months, with how many people did you have sexual intercourse?
- A. I have never had sexual intercourse
  - B. I have had sexual intercourse, but not during the past 3 months
  - C. 1 person
  - D. 2 people
  - E. 3 people
  - F. 4 people
  - G. 5 people
  - H. 6 or more people
63. Did you drink alcohol or use drugs before you had sexual intercourse the **last time**?
- A. I have never had sexual intercourse
  - B. Yes
  - C. No

64. The **last time** you had sexual intercourse, did you or your partner use a condom?
- A. I have never had sexual intercourse
  - B. Yes
  - C. No



65. The **last time** you had sexual intercourse, what **one** method did you or your partner use to **prevent pregnancy**? (Select only **one** response.)
- A. I have never had sexual intercourse
  - B. No method was used to prevent pregnancy
  - C. Birth control pills
  - D. Condoms
  - E. Depo-Provera (injectable birth control)
  - F. Withdrawal
  - G. Some other method
  - H. Not sure
66. How many times have you been pregnant or gotten someone pregnant?
- A. 0 times
  - B. 1 time
  - C. 2 or more times
  - D. Not sure

**The next 7 questions ask about body weight.**

67. How do **you** describe your weight?
- A. Very underweight
  - B. Slightly underweight
  - C. About the right weight
  - D. Slightly overweight
  - E. Very overweight
68. Which of the following are you trying to do about your weight?
- A. **Lose** weight
  - B. **Gain** weight
  - C. **Stay** the same weight
  - D. I am **not trying to do anything** about my weight

69. During the past 30 days, did you **exercise** to lose weight or to keep from gaining weight?
- A. Yes
  - B. No
70. During the past 30 days, did you **eat less food, fewer calories, or foods low in fat** to lose weight or to keep from gaining weight?
- A. Yes
  - B. No
71. During the past 30 days, did you **go without eating for 24 hours or more** (also called fasting) to lose weight or to keep from gaining weight?
- A. Yes
  - B. No
72. During the past 30 days, did you **take any diet pills, powders, or liquids** without a doctor's advice to lose weight or to keep from gaining weight? (Do **not** include meal replacement products such as Slim Fast.)
- A. Yes
  - B. No
73. During the past 30 days, did you **vomit or take laxatives** to lose weight or to keep from gaining weight?
- A. Yes
  - B. No

The next 11 questions ask about food you ate or drank during the past 7 days. Think about all the meals and snacks you had from the time you got up until you went to bed. Be sure to include food you ate at home, at school, at restaurants, or anywhere else.

74. During the past 7 days, how many times did you drink **100% fruit juices** such as orange juice, apple juice, or grape juice? (Do **not** count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)
- A. I did not drink 100% fruit juice during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
75. During the past 7 days, how many times did you eat **fruit**? (Do **not** count fruit juice.)
- A. I did not eat fruit during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
76. During the past 7 days, how many times did you eat **green salad**?
- A. I did not eat green salad during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - F. 4 or more times per day
77. During the past 7 days, how many times did you eat **potatoes**? (Do **not** count french fries, fried potatoes, or potato chips.)
- A. I did not eat potatoes during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
78. During the past 7 days, how many times did you eat **carrots**?
- A. I did not eat carrots during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day

79. During the past 7 days, how many times did you eat **other vegetables**? (Do **not** count green salad, potatoes, or carrots.)

- A. I did not eat other vegetables during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

80. During the past 7 days, how many servings of **dairy products** did you eat or drink such as milk, yogurt, or cheese? (Include the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one glass.)

- A. I did not have any servings of dairy products during the past 7 days
- B. 1 to 3 servings during the past 7 days
- C. 4 to 6 servings during the past 7 days
- D. 1 serving per day
- E. 2 servings per day
- F. 3 servings per day
- G. 4 or more servings per day

81. During the past 7 days, how many times did you eat **baked goods** such as cookies, donuts, brownies, cakes, cinnamon rolls, or pie?

- A. I did not eat any baked goods during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

82. During the past 7 days, how many times did you drink **regular soda** (do not include diet soda)?

- A. I did not drink regular soda during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

83. During the past 7 days, how many times did you drink **non-carbonated sugared beverages** such as Gatorade, PowerAde, Fruitopia, Kool-Aid, or Sunny Delight?
- A. I did not drink non-carbonated sugared beverages during the past 7 days
  - B. 1 to 3 times during the past 7 days
  - C. 4 to 6 times during the past 7 days
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day
84. During the past 7 days, on how many days did you eat **breakfast**?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days

**The next 2 questions ask about food preferences.**

85. During an average school week (Monday – Friday), how many times do you eat **fast food** such as Taco Bell, Wendy's, McDonald's, Sonic, or Panda Express? (Include fast food eaten before, during, and after school hours.)
- A. I do not eat fast food during an average school week
  - B. 1 to 3 times during an average school week
  - C. 4 to 6 times during an average school week
  - D. 1 time per day
  - E. 2 times per day
  - F. 3 times per day
  - G. 4 or more times per day

**The next 9 questions ask about physical activity.**

86. On how many of the past 7 days did you exercise or participate in physical activity for **at least 20 minutes that made you sweat and breathe hard**, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days

87. On how many of the past 7 days did you participate in physical activity for **at least 30 minutes** that did **not** make you sweat or breathe hard, such as fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days
88. During the past 7 days, on how many days were you physically active for a total of **at least 60 minutes per day**? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days
  - G. 6 days
  - H. 7 days
89. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Nintendo, Game Boy, Play Station, computer games, and the Internet.)
- A. I do not play video or computer games or use a computer for something that is not school work
  - B. Less than 1 hour per day
  - C. 1 hour per day
  - D. 2 hours per day
  - E. 3 hours per day
  - F. 4 hours per day
  - G. 5 or more hours per day
90. On an average school day, how many hours do you watch TV?
- A. I do not watch TV on an average school day
  - B. Less than 1 hour per day
  - C. 1 hour per day
  - D. 2 hours per day
  - E. 3 hours per day
  - F. 4 hours per day
  - G. 5 or more hours per day
91. In an average week when you are in school, on how many days do you go to physical education (PE) classes?
- A. 0 days
  - B. 1 day
  - C. 2 days
  - D. 3 days
  - E. 4 days
  - F. 5 days

92. During an average physical education (PE) class, how many minutes do you spend actually exercising or playing sports?
- A. I do not take PE
  - B. Less than 10 minutes
  - C. 10 to 20 minutes
  - D. 21 to 30 minutes
  - E. 31 to 40 minutes
  - F. 41 to 50 minutes
  - G. 51 to 60 minutes
  - H. More than 60 minutes
93. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)
- A. 0 teams
  - B. 1 team
  - C. 2 teams
  - D. 3 or more teams
94. During the past 30 days, did you see a doctor or nurse for an injury that happened while exercising or playing sports?
- A. I did not exercise or play sports during the past 30 days
  - B. Yes
  - C. No

**The next 5 questions ask about other health-related topics.**

95. Have you ever been taught about AIDS or HIV infection in school?
- A. Yes
  - B. No
  - C. Not sure
96. Has a doctor or nurse ever told you that you have asthma?
- A. Yes
  - B. No
  - C. Not sure

97. During the past 12 months, have you had an episode of asthma or an asthma attack?
- A. I do not have asthma
  - B. No, I have asthma, but I have not had an episode of asthma or an asthma attack during the past 12 months
  - C. Yes, I have had an episode of asthma or an asthma attack during the past 12 months.
  - D. Not sure
98. Has a doctor or nurse ever told you that you have diabetes?
- A. Yes
  - B. No
  - C. Not sure
99. Are you on a special diet or exercise plan because of your diabetes?
- A. No, I do not have diabetes
  - B. Yes, I am on a special diet only
  - C. Yes, I am on a special diet and a special exercise plan
  - D. Yes, I am on a special exercise plan only
  - E. I have diabetes, but I am not on a special diet or a special exercise plan

**This is the end of the survey.  
Thank you very much for your help.**

## Appendix B: The 2005 Arizona Youth Risk Behavior Survey (YRBS) Highlights —Yuma<sup>§</sup>

The Youth Risk Behavior Survey measures the prevalence of specific personal behaviors that directly affect the health of our youth. The highlights are based on a sample of 1501 high school students and the results are representative of all students in grades 9-12 in Yuma county.

### Tobacco Use

- 59.3% Ever tried cigarettes
- 14.3% Smoked cigarette before 13 years old
- 19.5% Smoked during the past month
- 7.3% Smoked more than 10 cigarettes/day during the past month
- 9.2% Smoked daily during the past month
- 4.8% Smoked on 20 of the past 30 days
- 10.9% Got cigarettes in store during the past month
- 4.6% Smoked at school during the past month

### Healthy Eating

- 18.3% Ate 5-A-Day during the past week<sup>2</sup>
- 17.8% Had 3 or more dairy products per day
- 22.3% Ate baked food daily
- 27.4% Drank regular soda daily
- 21.5% Had sugared beverages daily
- 25.9% Ate breakfast daily
- 10.4% Ate fast food daily

### Physical Activity (P.A.)

- 35.2% Participated in insufficient physical activity<sup>1</sup> during the past week
- 11.2% No exercise
- 32.1% Active 60 min on five or more days during the past week
- 42.2% Attended PE class daily
- 46.0% Played on sports teams during past year
- 40.5% Watched 3 or more hours of TV per day
- 14.7% Played 3 or more hours of computer or video games

### Overweight

- 15.9% At risk of becoming overweight
- 19.6% Overweight

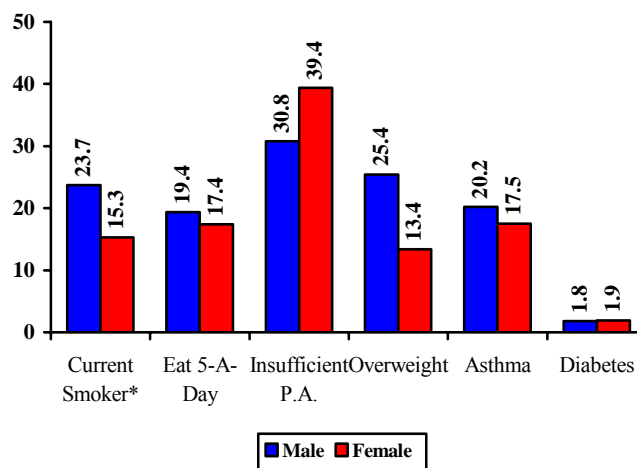
### Health Status

- 13.1% Described health as fair or poor
- 18.9% Told asthma by a doctor or nurse
- 1.9% Told diabetes by a doctor or nurse

### Prevention

- 51.0% Among smokers, tried to quit smoking
- 52.8% Trying to lose weight
- 64.4% Exercised to lose weight during the past month
- 44.2% Ate less to lose weight during the past month
- 2.9% On a diet or exercise plan for diabetes

Percentage of Youth Risk Behaviors, by Gender, Yuma, 2005



Note:

<sup>1</sup> Had not participated in at least 20 minutes of vigorous physical activity on three or more of the past seven days and had not participated in at least 30 minutes of moderate physical activity on five or more of the past seven days.

<sup>2</sup> Ate five or more fruits/vegetables during the past week

\* Smoked during the past month

<sup>§</sup> Yuma County YRBS data was made possible through funding from the Steps to A Healthier Arizona Initiative

## Appendix C: The 2005 Arizona Youth Risk Behavior Survey (YRBS) Highlights — Arizona

The Youth Risk Behavior Survey measures the prevalence of specific personal behaviors that directly affect the health of our youth. The highlights are based on a sample of 3307 high school students and the results are representative of all students in grades 9-12 in Arizona.

### Tobacco Use

- 58.2% Ever tried cigarettes
- 16.3% Smoked cigarette before 13
- 21.4% Smoked during the past month
- 10.1% Smoked more than 10 cigarettes/day during the past month
- 12.7% Smoked daily during the past month
- 7.5% Smoked on 20 of the past 30 days
- 11.4% Got cigarettes in store during the past month
- 4.7% Smoked at school during the past month

### Healthy Eating

- 15.2% Ate 5-A-Day<sup>2</sup> during the past week
- 15.2% Had 3 or more dairy products per day
- 21.5% Ate baked food daily
- 29.9% Drank regular soda daily
- 20.0% Had sugared beverages daily
- 26.4% Ate breakfast daily
- 10.7% Ate fast food daily

### Physical Activity (P.A.)

- 33.1% Participated in insufficient physical activity<sup>1</sup> during the past week
- 8.7% No exercise
- 32.3% Active 60 min on 5 or more days during the past week
- 26.2% Attended PE class daily
- 47.1% Played on sports teams during the past year
- 32.8% Watched 3 or more hours of TV per day
- 18.6% Played 3 or more hours of computer or video games

### Overweight

- 11.9% At risk of becoming overweight
- 13.6% Overweight

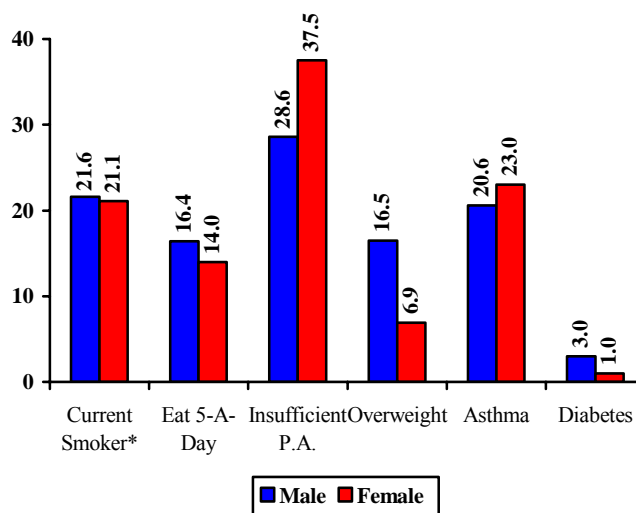
### Health Status

- 10.7% Described health as fair or poor
- 21.8% Told asthma by a doctor or nurse
- 2.0% Told diabetes by a doctor or nurse

### Prevention

- 51.1% Among smokers, tried to quit smoking
- 45.9% Trying to lose weight
- 60.7% Exercised to lose weight during the past month
- 39.3% Ate less to lose weight during the past month
- 2.5% On a diet or exercise plan for diabetes

Percentage of Youth Risk Behaviors, by Gender, Arizona, 2005



Note:

<sup>1</sup> Had not participated in at least 20 minutes of vigorous physical activity on three or more of the past seven days and had not participated in at least 30 minutes of moderate physical activity on five or more of the past seven days.

<sup>2</sup> Ate five or more fruits/vegetables during the past week

\* Smoked during the past month